

June 14, 2007

MEMORANDUM

TO: Legislative Finance Committee Members

FROM: Norton Francis, LFC Chief Economist; Michelle Aubel, LFC Fiscal Analyst; Alexis Lotero, DFA Executive Analyst; Michael Marcelli, DFA Executive Analyst

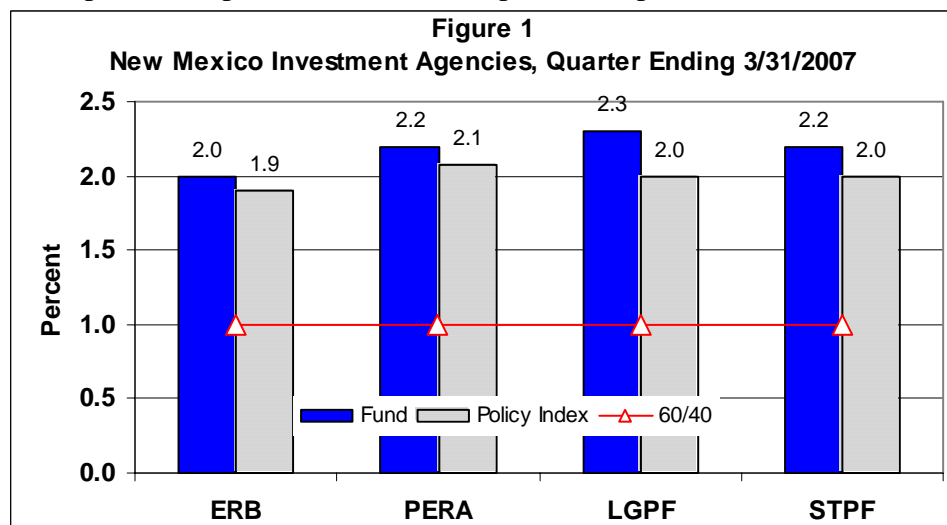
**SUBJECT: Joint Report of Investment Performance – FY2007 Third Quarter**

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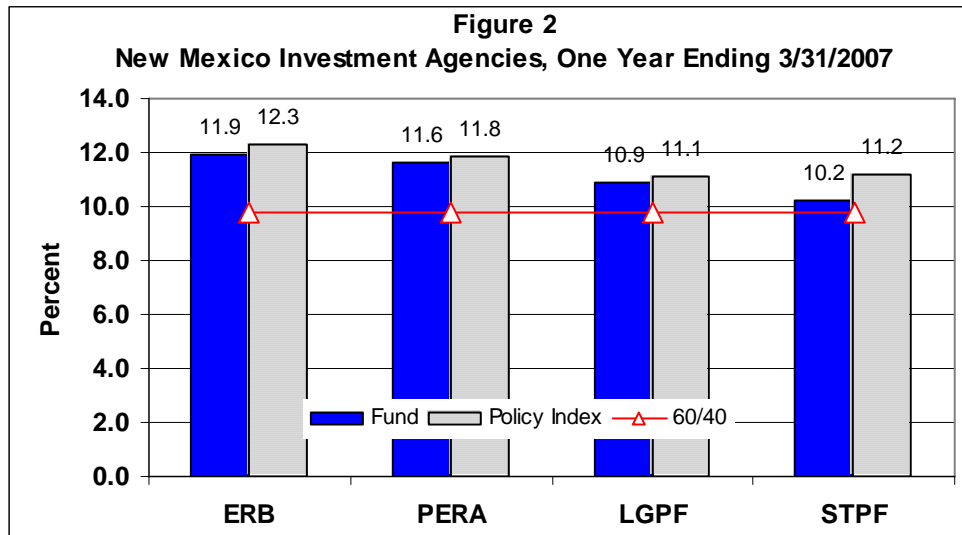
This report is jointly prepared by the LFC and DFA investment oversight staff, per the Accountability in Government Act. In reviewing performance between the funds, it is important to keep in mind that the funds have different asset allocations, different strategies and different restrictions. All of the funds have entered alternative investment asset classes -- which include private equity, hedge funds, real assets and real estate -- but the State Investment Council (SIC) has been allocating to these asset classes longer than the Public Employees Retirement Association (PERA) and the Educational Retirement Board (ERB) so they have higher allocations and more mature investments. SIC also has a constitutional restriction on the amount it can invest in the equity asset class that has outperformed all of the other classes. More information on asset allocation is provided following the economic and financial market section.

**SUMMARY OF FUND PERFORMANCE**

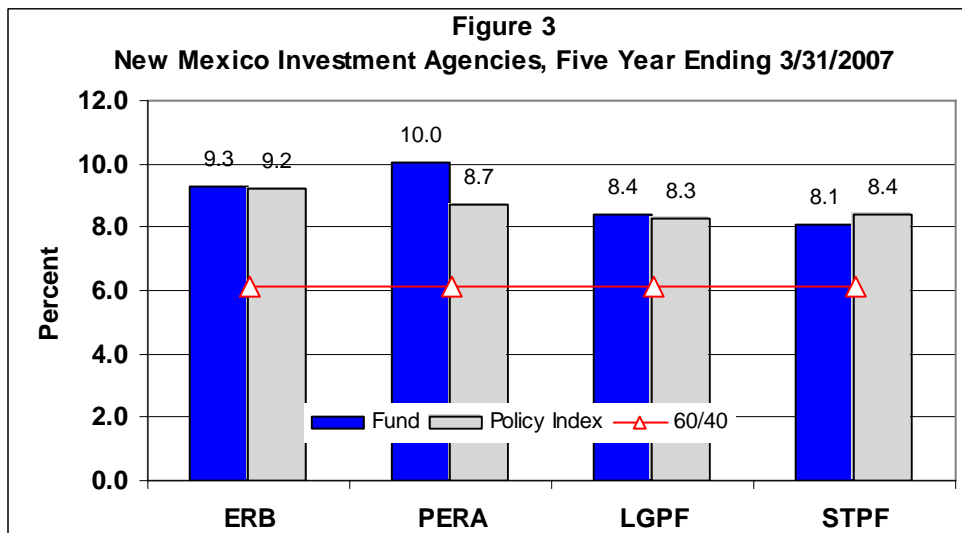
Quarter Ending March 31, 2007. Investment returns for the third quarter dropped significantly from the prior quarter, although remaining positive for all funds. As shown in Figure 1, total fund investment returns ranged between 2.0 percent and 2.3 percent for the quarter, which beat the 60 percent stock/40 percent bond index by at least 100 basis points. The Land Grant Permanent Fund (LGPF) and the Severance Tax Permanent Fund (STPF), both managed by the SIC, returned 2.3 percent and 2.2 percent respectively. PERA also reported 2.2 percent while ERB reported 2.0 percent.



Year Ending March 31, 2007. For the one-year period ending March 31, 2007, the investment program returns all exceeded 10 percent, with ERB having the highest return of 11.9 percent. Contrary to the quarterly returns, all funds performed below their respective benchmarks, indicating that active management failed to keep up with a passive basket of similar investments. Indeed, for the year ending 3/31/2007, manager impact was slightly negative across all funds. However, the returns were all higher than a straight 60/40 stock & bond portfolio, which returned 9.8 percent for the year.



Five Years Ending March 31, 2007. For the five years ending March 31, 2007, only PERA notably beat its benchmark, which it did by 133 basis points. LGPF slightly outperformed its benchmark return with an 8.4 percent performance while STPF returned 8.1 percent, 30 basis points behind its benchmark. ERB beat its five-year benchmark for the first time in several years and, assuming continued good performance, should show sustained improvement in this marker as poor-performing quarters through 2001-2003 drop off. Over this longer term all of the funds performed better than if they had been in a 60/40 index, which returned only 6.1 percent.



## FUND ASSET VALUES

Table 1 presents changes in asset values as of March 31, 2007. The quarterly and annual asset value changes in the table reflect both contributions and disbursements to each of these funds in addition to investment returns. The total value of the funds on March 31, 2007 was \$36.4 billion, up approximately \$678 million from total fund value of \$35.7 billion as of December 31, 2006. For the year ending March 31<sup>st</sup>, total fund value of all funds is up \$3.4 billion from the March 31, 2006 value of \$32.9 billion. PERA's fund balance includes the assets of all retirement funds at PERA, except those held at the State Treasurer's Office (STO) for operational purposes (\$18.6 million).

**Table 1**  
**Current Asset Values (millions)**  
**For Quarter and Year Ending March 31, 2007**

<b>Quarterly</b>	<b>ERB</b>	<b>PERA*</b>	<b>LGPF</b>	<b>STPF</b>	<b>TOTAL</b>
Current Asset Values (3/31/07)	\$ 9,118	\$ 12,712	\$ 10,083	\$ 4,460	\$ 36,373
Value Change (Previous Quarter)	143	250	210	75	678
Percent Change	1.6%	2.0%	2.1%	1.7%	1.9%
<b>Annual</b>	<b>ERB</b>	<b>PERA*</b>	<b>LGPF</b>	<b>STPF</b>	<b>TOTAL</b>
Ending Asset Values (3/31/06)	\$ 8,289	\$ 11,455	\$ 9,125	\$ 4,071	\$ 32,941
Value Change (Year Ago)	828.2	1,257.1	958.3	389.1	3,432.6
Percent Change	10.0%	11.0%	10.5%	9.6%	10.4%

\*Excludes assets held at STO

## ECONOMIC AND FINANCIAL MARKET ENVIRONMENT

The quarter ended with 0.6 percent growth in gross domestic product, up from a revised 2.5 percent in the previous quarter. Returns from the major stock indices rocked back and forth throughout the quarter. The Dow Jones Industrial Average ended the quarter at 12,354.35, up 11.2 percent from the previous year and down 0.9 percent for the quarter. The DJIA hit a record level in February immediately before a huge drop of 3.3 percent on February 27 following a major correction in the Chinese markets. The S&P 500, a broader index of the market, also had a lackluster quarter, ending 0.2 percent higher than the previous quarter. For the year, the index was 9.7 percent ahead. Only the NASDAQ, which is heavily weighted with technology stocks, came out slightly better than the S&P 500, ending the quarter up 0.3 percent over the last quarter and 3.5 percent above the close of the first quarter of 2006.

Several factors roiled the equity markets: former Federal Reserve Chairman Alan Greenspan indicated a possibility (without actually predicting) of a recession by the end of 2007; the steep drop in Asian markets; and worry about the subprime mortgage market infecting the rest of the economy caused the largest falls during the quarter. Other influences were positive. Current Fed Chairman Ben Bernanke's comments about "moderation in the growth of the economy" hints that a cut in interest rates may be in the near term and economic indicators, like employment and corporate profits, buoyed the markets.

For the fixed income markets, the yield curve was essentially flat and even upward-sloping depending on the maturities. The bond markets reacted to the same news that affected the equities markets and saw record low spreads prior to major selloffs in February (right when the equities market was dropping). The Lehman Brothers Aggregate, a core bond index, returned 1.5 percent for the quarter, up from 1.2 the prior quarter. For the year, the index returned 6.59 percent. The Merrill Lynch High Yield, a higher risk fund that includes junk bonds, had a higher return of 2.4 percent for the quarter and 10.5 percent for the year.

## ASSET ALLOCATION AND RETURN BY ASSET CLASS

The SIC funds remain basically unchanged for the quarter. PERA is still slightly above its target allocations in domestic and international equities and under the target in fixed income while it transitions its assets to include to alternatives. ERB also has been moving assets out of the fixed income class and equities into alternatives, such as hedge funds, and has adjusted its target allocations correspondingly. In Table 2, ERB's prior target allocations are shown below the newly revised targets (in parentheses) for comparison purposes. Alternatives, which had a zero policy allocation, will now account for a projected 15 percent of assets when the plan is fully implemented.

**Table 2**  
**Fund Asset Allocation and Return Detail, Quarter Ending March 31, 2007**

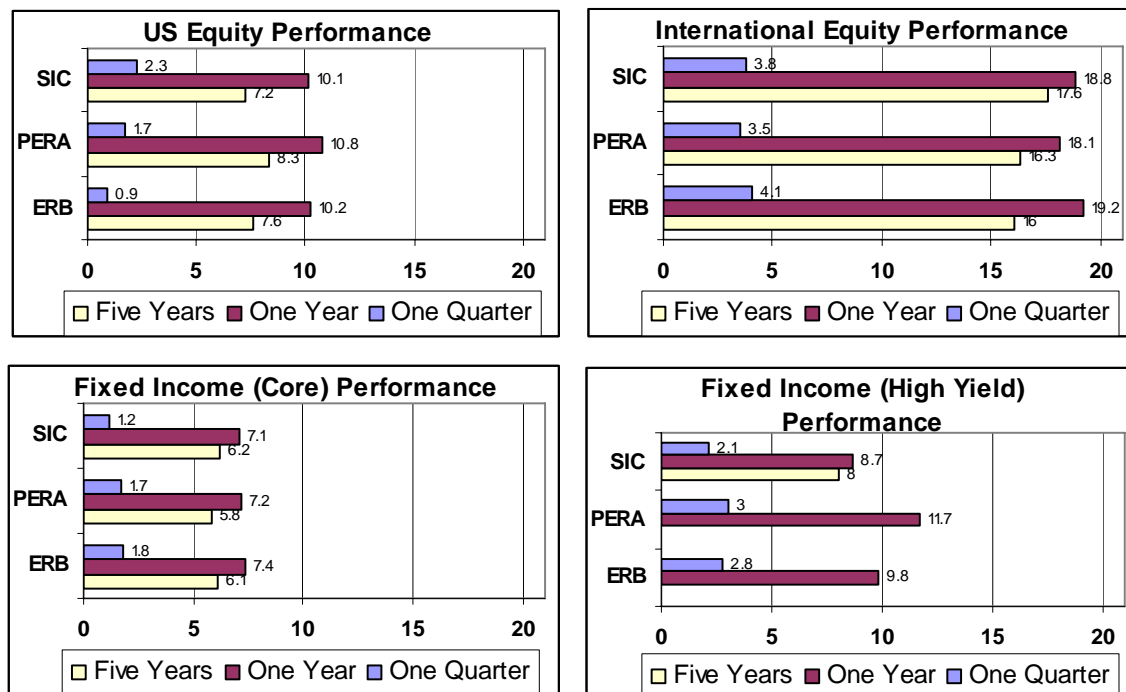
	ERB		PERA		LGPF		STPF	
	Actual	Target	Actual	Target	Actual	Target	Actual	Target
<b>Total US Equity</b>	<b>39%</b>	<b>40%</b>	<b>42%</b>	<b>40%</b>	<b>52%</b>	<b>53%</b>	<b>50%</b>	<b>53%</b>
		(51%)						
<b>International Equity</b>	<b>19%</b>	<b>18%</b>	<b>28%</b>	<b>25%</b>	<b>11%</b>	<b>10%</b>	<b>12%</b>	<b>10%</b>
		(20%)						
<b>Total Fixed Income</b>	<b>27%</b>	<b>27%</b>	<b>29%</b>	<b>35%</b>	<b>21%</b>	<b>18%</b>	<b>17%</b>	<b>12%</b>
		(29%)						
<b>Total Alternatives</b>	<b>11%</b>	<b>15%</b>	<b>1%</b>	<b>0%</b>	<b>16%</b>	<b>19%</b>	<b>19%</b>	<b>25%</b>
<b>Private Equity</b>	0.5%	5.0%	0.1%		4.6%	6.0%	7.6%	12.0%
<b>Hedge Funds</b>	6.4%	5.0%	1.0%		9.7%	10.0%	9.4%	10.0%
<b>Real Estate/Real Assets</b>	4.3%	5.0%	0.0%		1.3%	3.0%	2.2%	3.0%
<b>Cash Equivalents</b>	3.2%	0.0%	0.5%	0.0%	0.7%	0.0%	1.3%	0.0%
<b>Total Fund %</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Because ERB chose a fund-of-fund approach to its hedge fund (or “absolute return”) strategy, funds into this asset class were quickly deployed. As of March 31, this class stands at 1.4% above its lower target due to a rebalancing of domestic equities, which had surpassed that asset's upper limit of its policy range. Private Equity and the Real Estate/Real Asset classes take longer to “ramp up”. In fact, it is fully expected for the Private Equity class to take up to five years to be fully committed to take advantage of the “vintage year” concept, and even longer for committed funds to actually be invested. Real Estate Investment Trusts (REITs), which some consider a small cap asset because they trade like a stock, account for 100 percent of ERB's Real Estate portfolio at this

time, but will be liquidated to fund direct investments in this class up to the target allocation. ERB's cash balance, which also increased due to the equity rebalancing, has been kept unusually high to provide liquid funds for the alternative rollout.

Asset allocation can have a large impact on overall return. SIC is constitutionally restricted from investing more than 65 percent in total equity with the added restriction that no more than 15 percent can be invested in any type of international asset.<sup>1</sup> Even though all of the funds have similar performance on U.S. and International equity (see charts below), SIC's allocation must be less than 65 percent of the portfolio. In contrast, PERA has almost 70 percent invested in these two asset classes with the highest allocation by far in international equity, which has been the strongest performer of the last five years. Further, the STPF has economically-targeted investments that, although represent a small allocation, have economic development goals as well as return goals and, therefore, may produce a slight drag on overall returns. The benchmark for these funds is the 90-day Treasury bill, considered a "risk-free" investment.

**Figure 4: Agency investment return by asset class**



As the charts above show, the SIC funds had the best quarterly performance for US equity (the largest allocation for all of the funds), ERB had the best quarter for international and PERA had the best for high yield fixed income. For the one year, each fund had an asset class in the spotlight: PERA had the strongest return for US equity, SIC had the best performance in core fixed equity and ERB had the best international equity

<sup>1</sup> SIC could raise their international equity to 15 percent but then could only invest 50 percent in US Equity and make no more international investments such as an international private equity. Conversely, if SIC wanted to invest 60 percent in US equity, only 5 percent could be invested in international equity.

performance. The high return of international equity is particularly frustrating for SIC given the constitutional restriction.

**Alternatives.** The following information is provided as a foundation for the introduction of alternative investments and performance reporting beginning with the June 30<sup>th</sup>, 2007 quarterly report.

Accountability and transparency are serious issues with most of the alternative investment asset classes since by their nature reporting and valuation is very difficult. Each agency has at least one advisor that screens funds and investments. SIC has an advisor for its national private equity program (Aldus), one for its NM Coinvestment Program (Sun Mountain) and one for its real estate investments (Courtland). PERA uses Cliffwater for all of its alternatives and ERB uses Aldus for private equity, with its general manager—New England Pension Consultants—providing guidance while ERB develops a consultant for real estate. Each advisor presents the agency with investments that they have screened using various criteria such as size, past offerings' performance, managers' expertise and commitment, and strategy.

Evaluating performance for alternatives entails various issues. For example, private equity investing, unlike other asset classes, is generally long-term investing and the performance could appear miserable early on because the investments have not matured yet fees are being paid (known as the “J-curve”). In addition, these investments rely not so much on metrics (such as economic indicators GDP, employment, etc.) but on the skill and managerial experience of the assembled team, which is more nebulous to measure. Another evaluation difficulty is the proliferation of hedge funds with different strategies, which makes comparisons difficult. Even within a strategy, such as Leveraged buy-out (LBO), LBOs can be positioned differently within the group.

Last summer, the Legislative Council Service contracted with PFM Advisors to brief the LFC on alternative assets. The brief included a discussion of “red flags” in alternative investing and some guidelines for evaluating these investments.

- Private Equity (Venture Capital): It is important to remember that many if not most of the investments will fail to generate significant returns but one or two out of ten make the return for the whole portfolio. The main concepts to monitor are the fees relative to the industry and the size of the fund. “[As] funds get larger, the fees by the [General Partner] tend to become less transparent.”
- Hedge Funds: This class of investment is largely unregulated by the Securities Exchange Commission. Hedge funds rely on pricing inefficiencies which may become harder to identify as more money is invested in the instruments and more scrutiny by more investors and the media comes to bear. It is important to monitor the extent of leverage and the level of risk that a fund takes on. Fees are also important to monitor and it is imperative to know the fee structure for a “fund of funds” which may generate higher fees. Both ERB and SIC invest in fund-of-funds but the fees are low by industry standards.

- Real Estate: Traditionally, real estate has been characterized by low risk compared to the equities market but recently the “beta,” a measure of risk, has moved higher suggesting it is becoming more volatile.

The LFC is using these tools to monitor all of the funds and has begun a “best practices” survey of how other similar state legislatures monitor investment agencies. Preliminary information from California, Arizona, and Alaska indicate that the New Mexico legislature plays a much larger role in oversight of investing agencies. Alaska reported that the legislature watches unofficially but does not prepare any reports. Arizona monitors on an ad-hoc basis when issues arise and usually part of a bigger issue like retirement fund solvency. The California legislature has virtually no role and relies on reporting from the agencies.

LFC will also be customizing the tools to better reflect New Mexico’s actual portfolios, particularly regarding private equity. As indicated, PFM’s comments concerning this asset class relate to Venture Capital (VC), where early stage investing quite often fails to yield a positive return. However, this statement does *not* apply to many other types of private equity investments, particularly those that fall later in the business cycle or involve a “turn-around” of a seasoned company. In addition, it appears that the New Mexico agencies have little or no exposure to the early VC subclass. A future report will provide a more thorough look at each agency’s private equity portfolio.

### **ADDITIONAL DETAIL ON FUND PERFORMANCE FOR QUARTER**

Table 3 below shows detailed fund performance for the quarter ending March 31, 2007. For comparison purposes, the table also provides the returns for a set of agreed-upon market benchmarks commonly used for particular asset classes. All funds outperformed the S&P500 for the quarter and all of the funds except ERB outperformed the Russell 3000 and Wilshire 5000. ERB was the leader for fixed income and all funds lagged the developed country international equity benchmark.

**Table 3**  
**Fund Performance Detail (Quarter Ending 3/31/2007)**

<b>Asset Class</b>	<b>Benchmark**</b>	<b>ERB</b>	<b>PERA***</b>	<b>LGPF</b>	<b>STPF</b>
U.S. Equity (S&P 500)	0.6%	0.9%	1.7%	2.3%	2.3%
U.S. Equity (Russell 3000)	1.3%	0.9%	1.7%	2.3%	2.3%
U.S. Equity (Wilshire 5000 Cap Wtd)	1.4%	0.9%	1.7%	2.3%	2.3%
Real Estate Investment Trusts (REITS) (DJ Wilshire REIT)	3.7%	3.9%	n.a.	n.a.	n.a.
U.S. Fixed Income (LB Aggregate)	1.5%	1.8%	1.7%	1.2%	1.2%
U.S. High Yield Bonds (ML HY)	2.4%	2.8%	3.0%	2.1%	2.1%
U.S. High Yield Bonds (Citi HY Cash Pay)	2.7%	2.8%	3.0%	2.1%	2.1%
International Equity (MSCI EAFE)	4.1%	3.6%	3.5%	3.8%	3.8%
Emerging Markets Equity (MSCI EMF)	2.3%	3.5%	3.6%	3.8%	3.8%
Private Equity/Venture Capital (Cambridge Venture Capital)*	4.0%	-0.2%	n.a.	1.7%	0.7%
Real Estate (NCREIF)	3.6%	n.a.	n.a.	0.6%	0.4%
Hedge Funds (90 day T-bill + 200 basis points)	1.7%	4.3%	n.a.	3.4%	3.4%
<b>Individual Fund Policy Target</b>		1.9%	2.1%	2.0%	2.0%
<b>Total Fund Return</b>		<b>2.0%</b>	<b>2.2%</b>	<b>2.3%</b>	<b>2.2%</b>

\* Performance for Venture Capital is reported on a 3 to 4-month lag

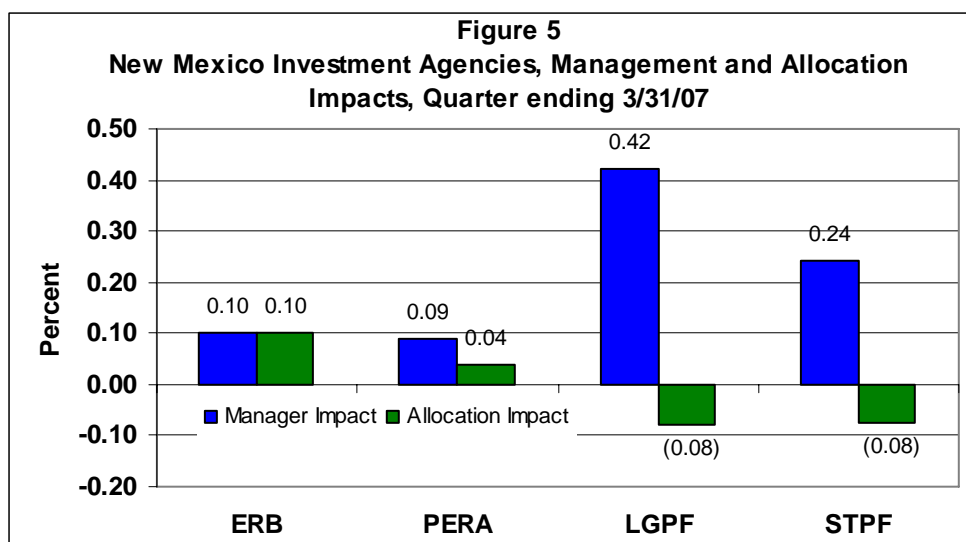
\*\* Benchmarks are for comparison purposes and do not necessarily correlate to the individual fund's policy targets.

\*\*\*Reported without alternatives.

## MANAGEMENT PERFORMANCE

The fund performance compared to the internal targets is made up of two primary components: manager impact and asset allocation impact. The manager impact is a measure of how the individual manager's performance compared to the performance of the related benchmark, and the allocation impact is the impact of a portfolio allocation deviating from the target (or policy) allocation. The portion of performance impact that cannot be attributed to either asset allocation or manager effect is usually ascribed to a "timing/other" category, which accounts for any remaining difference. For example, in PERA's case, this category would account for the .01 impact not attributed to either of the other two main impacts. As in this case, the timing/other category is normally minimal and, therefore, usually not referenced.

However, when significant and attributable, this report will make note, as is the case for ERB, where the positive impacts of the manager attribution (.10 percent) and allocation attribution (.10) are offset by what ERB reports as a "policy impact" of -.30 percent. This policy impact measures the effectiveness of the plan's structure.



- For the quarter, PERA was 13 basis points above its benchmark, with both manager selection and asset allocation adding value.
- ERB had positive impact due to managers and allocation, helping the fund outperform the benchmark by 10 basis points.
- LGPF outperformed its benchmark by 30 basis points: management allocation caused the bulk of the performance, adding 40 basis points, while allocation decreased overall return by 8 basis points.
- STPF also outperformed by 10 basis points with management delivering 24 and allocation taking away 8.

Table 4 presents the risk indicators for each fund. The risk profiles of all four funds are in line with each benchmark. PERA has the lowest standard deviation, the deviation



from the mean performance, and the highest Sharpe Ratio.<sup>2</sup> The investment allocation determines the aggregate level of risk a portfolio takes on. The Sharpe Ratio is just one indicator of portfolio risk. Originally designed for an asset mix that is restricted to stocks and bonds, it is uncertain whether the measure is an adequate measure for assessing the risk of portfolios that include alternative assets, which have a low or close to zero correlation to traditional investments. LFC is working with the agencies to determine if there are any additional indicators more suitable to the funds' growing complexity of varying asset classes, with any change targeted for the June 30, 2007 report.

**Table 4**  
**Risk Profiles as shown by Standard Deviations, Five Years Ending 3/31/07**

	<b>ERB</b>	<b>PERA</b>	<b>LGPF</b>	<b>STPF</b>
<b>FUND</b>				
Standard Deviation*	10.2	8.0	9.3	9.4
Sharpe Ratio**	0.7	0.9	0.7	0.6
<b>BENCHMARK</b>				
Standard Deviation*	10.8	9.0	9.9	9.9
Sharpe Ratio**	0.6	0.7	0.6	0.6

\* Standard deviation measures the fund's expected variability (deviation) from the expected return

\*\* Sharpe Ratio measures the risk-adjusted performance of a portfolio. The higher the number, the higher the return-to-risk level.  
Risk free return is 90-Day T-bill.

## **CURRENT ISSUES**

- PERA reports that R.V. Kuhns & Associates Inc. (RVK) ranked PERA at the upper 48<sup>th</sup> percentile of the RVK Plan Sponsor Peer Group Analysis for the cumulative five-year period ending March 31, 2007, beating PERA's Outcome Measure #2: Five-year annualized performance ranking to exceed the 49<sup>th</sup> percentile in a national survey of fifty to sixty similar large public pension plans in the United States. (The upper 48<sup>th</sup> equates to the 52<sup>nd</sup> percentile, i.e. above the 49<sup>th</sup> percentile.)
- Eclipse Aviation, an SIC investment, is now fully certified for production and is ramping up to meet the demand. As planes are delivered, the opportunity for the early investors, like SIC, to exit profitably expands.
- SIC issued a request for proposals for legal services to recover assets from the Region III Housing Authority. The last estimates available were about \$1.2 million potentially recoverable of the \$5 million investment.

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<sup>2</sup> The Sharpe ratio is determined by dividing the difference in return of the asset and a "risk-free" asset by the standard deviation. Although all fund advisors reported Sharpe ratios, LFC recalculated each ratio using the return of the 90 Treasury Bill to ensure consistency. The LFC calculated ratios were no different than the reported.

## SPECIAL FOCUS

This quarter's report introduces a new segment, *Special Focus*, which allows a more detailed analysis on one particular subject. This segment is dedicated to taking a closer look at PERA's alternative space, particularly since the detailed performance numbers provided for the March 31, 2007 report by RVK excluded alternatives. PERA anticipates the performance report for June 2007 will include all assets.

*Alternative Consultant.* PERA opted to employ a specialized investment manager for its alternative asset implementation, Cliffwater, LLC, which acts as a fiduciary and as a "gatekeeper." The Cliffwater team is led by Steve Nesbitt, CEO and consists of a team of 21 other professionals, all of whom have substantial expertise in the investment world, including alternatives, are well-regarded in the field, and appear to have access to the "in-demand" firms. Beginning earnestly last June, a 12-month work plan was developed, which essentially involved developing policies and guidelines, educating the board on alternatives, and presenting three recommendations per month beginning in December. Table 5 illustrates how the work plan has progressed over this time period by providing a snapshot of PERA's alternative assets as of March 31, 2007.

**Table 5**  
**Alternative Asset Allocation Detail, Quarter Ending March 31, 2007**  
(dollars in thousands)

	Category	Closing Date	Commitments	Draw-downs	Market Value	Distributions	Target Allocations*
<b>Private Equity - Total</b>			<b>\$121,750</b>	<b>\$7,137</b>	<b>\$6,785</b>	<b>\$0</b>	<b>\$636,450</b>
Coller Capital V	Non-US	Oct-06	\$25,000	\$1,168	\$1,073	\$0	
Hellman Friedman	US buyout	Nov-06	\$21,750	\$0	\$0	\$0	
Cerberus Series IV	Distressed	Dec-06	\$25,000	\$2,520	\$2,500	\$0	
Jordan Resolute II	US buyout	Jan-07	\$25,000	\$2,375	\$2,138	\$0	
Providence VI	US buyout	Jan-07	\$25,000	\$1,074	\$1,074	\$0	
Sun Capital V	US buyout	pending					
<b>Real Assets - Total</b>			<b>\$20,000</b>		<b>\$1,104</b>		<b>\$318,225</b>
Quantum Energy IV	Energy	Oct-06	\$20,000	\$1,451	\$1,104	\$0	
<b>Real Estate - Total</b>			<b>\$30,000</b>		<b>\$0</b>		<b>\$318,225</b>
Carlyle RE V	Opportunistic	Jan-07	\$30,000	\$301	\$0	\$0	
<b>Hedge Funds - Total</b>					<b>\$122,692</b>		<b>\$636,450</b>
Silver Point Capital Fund, L.P.	Credit	Feb-07			\$30,791		
Archipelago Partners, L.P.	Equity Long/Short	Feb-07			\$30,580		
Farallon Capital Institutional partners II, L.P.	Multi-Strategy	Jan-07			\$30,961		
OZ Domestic Partners II, L.P.	Multi-Strategy	Mar-07			\$30,360		

\* Based on total PERA Assets: \$12,729,000

Targeted allocations are 5% to private equity, 2.5% to real assets, 2.5 % to real estate and 5% to hedge funds for a total of 15% allocation to alternatives.

Note the typical “J-curve” demonstrated by the Market Value to Draw-downs for private equity. Commitments represent the maximum that will be “drawn down” over time to invest as opportunities present themselves. Usually to reach a 100% target allocation requires a greater than 100% commitment.

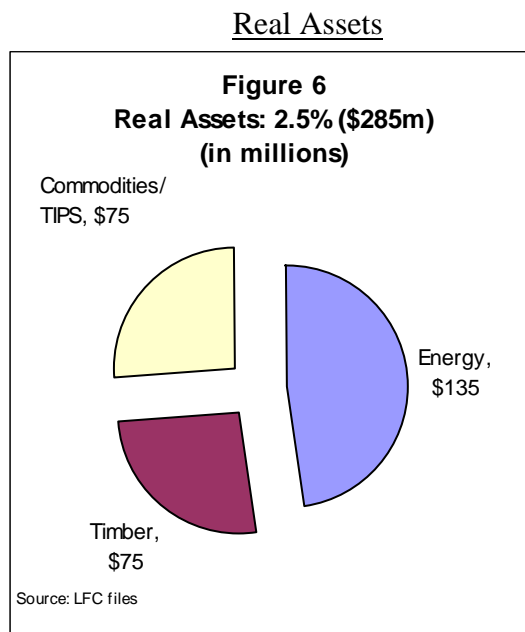
*Portfolio Strategy.* Cliffwater applied a diversification strategy for each asset class, which includes industry, location, type, “vintage year” and sector. Originally based on a June 2006 total asset value of \$11.3 billion, the percent targets will actually yield higher asset allocations as the fund grows.

*Procedure.* From the universe of potential investments, Cliffwater uses its proprietary screening processes to narrow the field to the final recommendations. A “due diligence” report on each recommendation is prepared by Cliffwater and extensively reviewed, first by PERA’s investment staff and secondly by PERA’s Investment Committee. Cliffwater makes the recommendation to the committee, where the proposed investment is evaluated and questions are answered. Based upon this review, deliberations following Cliffwater’s presentation, and the PERA staff recommendations, the committee then votes to accept or reject the potential investment. Accepted investments are then presented to the full Board for its vote of acceptance or rejection. To date, two potential Cliffwater recommendations were not approved by PERA staff and subsequently voted down by the Investment Committee or did not proceed further in the process.

*Progress.* As of March 31, 2007 approximately 1/5<sup>th</sup> of the proposed allocation in hedge funds has been invested and Cliffwater reported a 3.94 percent return for the hedge fund portfolio for the quarter. Private equity had \$3.3 million invested in December 2006 and \$7 million through March 31, which is an insufficient amount to provide a meaningful performance measure. A more detailed look at PERA’s rollout of alternative investments is provided below.

The PERA Board originally approved a 2.5% (\$285m) allocation to real assets of \$135 million to energy partnerships, \$75 million to timber partnerships, and \$75 million to commodities/TIPS based on the June asset value of \$11.3 billion. Cliffwater recommended that the energy partnership sub-allocation be invested over three “vintage years” at \$45 million per year, split between two partnerships.

*Quantum Energy* is the first of approximately 7+ energy partnerships at roughly \$20 million each. Cliffwater reports that PERA, behind its schedule due to the lack of quality investments currently available, is expected to regain traction in FY08. Timber investments are opportunistic.



## Real Estate

<b>Table 6</b>				
<b>Recommended Real Estate Ramp-Up (\$millions)</b>				
	<b>Fiscal 2007</b>	<b>Fiscal 2008</b>	<b>Fiscal 2009</b>	<b>Total</b>
<b>Direct - "Value-Added"</b>	\$35	\$35	\$35	\$105
<b>Direct - "Opportunistic"</b>	\$35	\$35	\$35	\$105
<b>Public REITs</b>	\$25	\$25	\$25	\$75
<b>Total Real Estate</b>	\$95	\$95	\$95	\$285
Source: LFC files				

The implementation plan calls for \$95 million committed to real estate by June 30, 2007. Cliffwater expects that \$50 million will be committed to direct real estate partnerships by that time, \$45 million short of plan. Again, Cliffwater expects to make up that shortfall in FY08 as the run-up in pricing in recent years subsides.

Private Equity. The 5% allocation to private equity was designed to be achieved through a multiyear program that is diversified by vintage year and sector, with annual commitments of approximately \$200 million per fiscal year to 8-10 private equity partnerships at roughly \$20-\$25 million per partnership. As can be seen in Table 5 on page 10, three sectors (categories) are represented, and the plan is on schedule.

Hedge Funds. Likewise, the hedge fund portfolio, allocated among the following categories: Market Neutral, Credit, Distressed, Event Driven, Equity Long/Short, Global Macro, and Multistrategy, is on schedule to reach near its June 30<sup>th</sup> target of \$375 million. Unlike private equity, real estate, and real asset partnerships, hedge fund partnerships are invested immediately. Note that PERA has accepted Cliffwater's recommendation to invest directly in hedge funds versus the "fund of funds" approach adopted by both SIC and ERB. Cliffwater suggests that the fund-of-fund strategy can lead to over-diversification and layering of manager fees, as well as leaving the "gatekeeping" role in the hand of the fund's general partner, who may or may not keep in close contact with the agency.